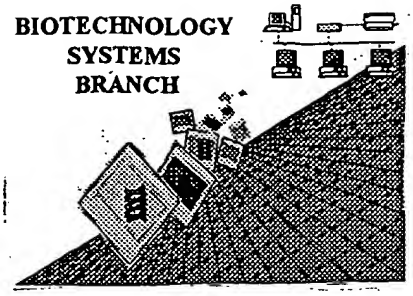
BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/744,100A
Source: PCT/09
Date Processed by STIC: 1/19/2002

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FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
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PCT09

RAW SEQUENCE LISTING DATE: 01/19/2002
PATENT APPLICATION: US/09/744,100A TIME: 11:42:19

Input Set : A:\bb1174 seq listing.txt
Output Set: N:\CRF3\01182002\I744100A.raw

Does Not Comply
Corrected Diskette Needed

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  3 <110> APPLICANT: Cahoon, Rebecca E.
  4       Gutteridge, Steven
  5       Lee, Jian Ming
  6       Rafalski, Antoni
  8 <120> TITLE OF INVENTION: Ornithine Biosynthesis Enzymes
 10 <130> FILE REFERENCE: BB-1174
 12 <140> CURRENT APPLICATION NUMBER: US/09/744,100A
 13 <141> CURRENT FILING DATE: 2001-01-18
 15 <150> PRIOR APPLICATION NUMBER: 60/093,209
 16 <151> PRIOR FILING DATE: 1998-07-17
 18 <160> NUMBER OF SEQ ID NOS: 12
 20 <170> SOFTWARE: Microsoft Office 97
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ERRORED SEQUENCES

see pp 3, 5, 7-14

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552 <211> LENGTH: 345
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554 <213> ORGANISM: Artificial Sequence
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557 <223> OTHER INFORMATION: Description of Artificial Sequence:CONSENSUS
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582 <223> OTHER INFORMATION: Xaa=Trp, His, or none
584 <220> FEATURE:
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RAW SEQUENCE LISTING DATE: 01/19/2002
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Input Set : A:\bb1174 seq listing.txt
Output Set: N:\CRF3\01182002\I744100A.raw

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587 <223> OTHER INFORMATION: Xaa=Leu or none
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607 <223> OTHER INFORMATION: Xaa=Leu or Phe
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617 <223> OTHER INFORMATION: Xaa=Val, Leu, or Asn
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622 <223> OTHER INFORMATION: Xaa=Pro or Leu
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626 <222> LOCATION: (16)
627 <223> OTHER INFORMATION: Xaa=Ser or Cys
629 <220> FEATURE:
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635 <221> NAME/KEY: UNSURE
636 <222> LOCATION: (18)
637 <223> OTHER INFORMATION: Xaa=Pro, Arg, or Ser
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642 <223> OTHER INFORMATION: Xaa=Pro, Val, Phe, or Leu
644 <220> FEATURE:
645 <221> NAME/KEY: UNSURE

RAW SEQUENCE LISTING DATE: 01/19/2002
PATENT APPLICATION: US/09/744,100A TIME: 11:42:19

Input Set : A:\bb1174 seq listing.txt
Output Set: N:\CRF3\01182002\I744100A.raw

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667 <223> OTHER INFORMATION: Xaa=Ser, Gly, Pro, or Lys
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671 <222> LOCATION: (26)
672 <223> OTHER INFORMATION: Xaa=Ser, Pro, Gln, or Ala
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675 <221> NAME/KEY: UNSURE
676 <222> LOCATION: (27)
677 <223> OTHER INFORMATION: Xaa=Asn or Ala
679 <220> FEATURE:
680 <221> NAME/KEY: UNSURE
681 <222> LOCATION: (28)
682 <223> OTHER INFORMATION: Xaa=His, Gln, or Arg
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685 <221> NAME/KEY: UNSURE
686 <222> LOCATION: (29)
687 <223> OTHER INFORMATION: Xaa=Ala, Leu, or Val
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697 <223> OTHER INFORMATION: Xaa=Pro or Thr
699 <220> FEATURE:
700 <221> NAME/KEY: UNSURE
701 <222> LOCATION: (32)
702 <223> OTHER INFORMATION: Xaa=Leu, Ile or Ser
704 <220> FEATURE:
705 <221> NAME/KEY: UNSURE
706 <222> LOCATION: (33)

→ what about Xaa at location 22?

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Input Set : A:\bb1174 seq listing.txt
Output Set: N:\CRF3\01182002\I744100A.raw

707 <223> OTHER INFORMATION: Xaa=Ala or His
709 <220> FEATURE:
710 <221> NAME/KEY: UNSURE
711 <222> LOCATION: (34)
712 <223> OTHER INFORMATION: Xaa=Ala or Ser
714 <220> FEATURE:
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721 <222> LOCATION: (36)
722 <223> OTHER INFORMATION: Xaa=Pro, Thr, or Ala
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726 <222> LOCATION: (37)
727 <223> OTHER INFORMATION: Xaa=Cys, Ala, Ser, or Pro
729 <220> FEATURE:
730 <221> NAME/KEY: UNSURE
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732 <223> OTHER INFORMATION: Xaa=Arg, Pro, Thr,or His
734 <220> FEATURE:
735 <221> NAME/KEY: UNSURE
736 <222> LOCATION: (39)
737 <223> OTHER INFORMATION: Xaa=Arg, Gly, or none
739 <220> FEATURE:
740 <221> NAME/KEY: UNSURE
741 <222> LOCATION: (40)
742 <223> OTHER INFORMATION: Xaa=Arg or Leu
744 <220> FEATURE:
745 <221> NAME/KEY: UNSURE
746 <222> LOCATION: (41)
747 <223> OTHER INFORMATION: Xaa=Ser or Arg
749 <220> FEATURE:
750 <221> NAME/KEY: UNSURE
751 <222> LOCATION: (42)
752 <223> OTHER INFORMATION: Xaa=Arg, Cys, His, or Gly
754 <220> FEATURE:
755 <221> NAME/KEY: UNSURE
756 <222> LOCATION: (43)
757 <223> OTHER INFORMATION: Xaa=Arg or Leu
759 <220> FEATURE:
760 <221> NAME/KEY: UNSURE
761 <222> LOCATION: (44)
762 <223> OTHER INFORMATION: Xaa=Arg or Ala
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765 <221> NAME/KEY: UNSURE
766 <222> LOCATION: (45)
767 <223> OTHER INFORMATION: Xaa=Ile, Leu, or Val

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PATENT APPLICATION: US/09/744,100A TIME: 11:42:19

Input Set : A:\bb1174 seq listing.txt
Output Set: N:\CRF3\01182002\I744100A.raw

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770 <221> NAME/KEY: UNSURE
771 <222> LOCATION: (46)
772 <223> OTHER INFORMATION: Xaa=Ser, Ala, or none
774 <220> FEATURE:
775 <221> NAME/KEY: UNSURE
776 <222> LOCATION: (47)
777 <223> OTHER INFORMATION: Xaa=Ala, Val,or none
779 <220> FEATURE:
780 <221> NAME/KEY: UNSURE
781 <222> LOCATION: (48)
782 <223> OTHER INFORMATION: Xaa=Thr, Val, or none
784 <220> FEATURE:
785 <221> NAME/KEY: UNSURE
786 <222> LOCATION: (49)
787 <223> OTHER INFORMATION: Xaa=Ala or Ser
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791 <222> LOCATION: (50)
792 <223> OTHER INFORMATION: Xaa=Thr, Ala, or Asn
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797 <223> OTHER INFORMATION: Xaa=Ala or Ser
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801 <222> LOCATION: (53)
802 <223> OTHER INFORMATION: Xaa=Pro, Gln, or Ser
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805 <221> NAME/KEY: UNSURE
806 <222> LOCATION: (54)
807 <223> OTHER INFORMATION: Xaa=Ser, Ala, or Pro
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810 <221> NAME/KEY: UNSURE
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822 <223> OTHER INFORMATION: Xaa=Ser, Ala, or Pro
824 <220> FEATURE:
825 <221> NAME/KEY: UNSURE
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827 <223> OTHER INFORMATION: Xaa=Ala, Glu, or Gln
829 <220> FEATURE:
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what about Xaa at location 58?

"Ala" is at location 59

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Input Set : A:\bb1174 seq listing.txt
Output Set: N:\CRF3\01182002\I744100A.raw

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    839 <220> FEATURE:
    840 <221> NAME/KEY: UNSURE
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    842 <223> OTHER INFORMATION: Xaa=Glu or Ala
    844 <220> FEATURE:
    845 <221> NAME/KEY: UNSURE
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    847 <223> OTHER INFORMATION: Xaa=Ala, Ser, or Gly
    849 <220> FEATURE:
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    851 <222> LOCATION: (65)
    852 <223> OTHER INFORMATION: Xaa=Leu or Gln
    854 <220> FEATURE:
    855 <221> NAME/KEY: UNSURE
    856 <222> LOCATION: (66)
    857 <223> OTHER INFORMATION: Xaa=Ser, Tyr or Asn
    859 <220> FEATURE:
    860 <221> NAME/KEY: UNSURE
    861 <222> LOCATION: (74)
    862 <223> OTHER INFORMATION: Xaa=Ala or Ser
    864 <220> FEATURE:
    865 <221> NAME/KEY: UNSURE
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    867 <223> OTHER INFORMATION: Xaa=Arg or Lys
    869 <220> FEATURE:
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    871 <222> LOCATION: (82)
    872 <223> OTHER INFORMATION: Xaa=Arg or Lys
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    875 <221> NAME/KEY: UNSURE
    876 <222> LOCATION: (86)
    877 <223> OTHER INFORMATION: Xaa=Val or Ile
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    880 <221> NAME/KEY: UNSURE
    881 <222> LOCATION: (106)
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    886 <222> LOCATION: (117)
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    889 <221> NAME/KEY: UNSURE
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RAW SEQUENCE LISTING DATE: 01/19/2002
PATENT APPLICATION: US/09/744,100A TIME: 11:42:19

Input Set : A:\bb1174 seq listing.txt
Output Set: N:\CRF3\01182002\I744100A.raw

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     894 <222> LOCATION: (135)
     895 <223> OTHER INFORMATION: Xaa=Val or Lys
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     898 <221> NAME/KEY: UNSURE
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     905 <223> OTHER INFORMATION: Xaa=Val or Ile
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     910 <223> OTHER INFORMATION: Xaa=Glu or Pro
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     914 <222> LOCATION: (139)
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     924 <222> LOCATION: (150)
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what about Xaa at location 140?

"Arg" is at location 142

what about Xaa at location 143?

"Ala" is at location 150.

what about Xaa at location 152?

"Glu" is at location 154

what about Xaa at location 155?

"Val" is at location 156

what about Xaa at location 157?

Val" is at location 161

what about Xaa at location 162?

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Input Set : A:\bb1174 seq listing.txt
Output Set: N:\CRF3\01182002\I744100A.raw

"Lys" is at location 166

950 <223> OTHER INFORMATION: Xaa=Asn, Glu, Thr or Gln → what about Xaa at location 167? what about Xaa at location 169?
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955 <223> OTHER INFORMATION: Xaa=Asn, Lys or Arg
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959 <222> LOCATION: (173)
960 <223> OTHER INFORMATION: Xaa=Ile, Leu, Lys or Pro
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963 <221> NAME/KEY: UNSURE
964 <222> LOCATION: (174)
965 <223> OTHER INFORMATION: Xaa=Ala or Pro → what about Xaa at location 175?
W--> 967 <220> FEATURE:
968 <221> NAME/KEY: UNSURE
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970 <223> OTHER INFORMATION: Xaa=Thr or Ser → what about Xaa at location 178?
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975 <223> OTHER INFORMATION: Xaa=Val or Ile
W--> 977 <220> FEATURE:
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980 <223> OTHER INFORMATION: Xaa=Gly or Ser → what about Xaa at location 181?
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983 <221> NAME/KEY: UNSURE
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994 <222> LOCATION: (185)
995 <223> OTHER INFORMATION: Xaa=Asp or Glu
W--> 997 <220> FEATURE:
998 <221> NAME/KEY: UNSURE
999 <222> LOCATION: (186)
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"Leu" is at location 189
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W--> 1007 <220> FEATURE:
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Output Set: N:\CRF3\01182002\I744100A.raw

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W--> 1017 <220> FEATURE:
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W--> 1022 <220> FEATURE:
1023 <221> NAME/KEY: UNSURE
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1030 <223> OTHER INFORMATION: Xaa=Glu or Ala
W--> 1032 <220> FEATURE:
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1035 <223> OTHER INFORMATION: Xaa=Lys or Ala
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1059 <222> LOCATION: (207)
1060 <223> OTHER INFORMATION: Xaa=Ser, Trp, Ala or Thr
W--> 1062 <220> FEATURE:
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1064 <222> LOCATION: (209)
1065 <223> OTHER INFORMATION: Xaa=Val or Lys
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1068 <221> NAME/KEY: UNSURE
1069 <222> LOCATION: (210)
1070 <223> OTHER INFORMATION: Xaa=Asp or Asn
W--> 1072 <220> FEATURE:

what about Xaa at location 192?

"Pro" is at location 194

what about Xaa at location 195?

"Pro" is at location 196

what about Xaa at location 200?

"Leu" is at location 201

what about Xaa at location 203?

"Gly" is at location 205

what about Xaa at location 206?

"Val" is at location 207

what about Xaa at location 208?

"Arg" is at location 209

RAW SEQUENCE LISTING DATE: 01/19/2002
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Input Set : A:\bb1174 seq listing.txt
Output Set: N:\CRF3\01182002\I744100A.raw

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1074 <222> LOCATION: (211)
1075 <223> OTHER INFORMATION: Xaa=Ala or Pro
W--> 1077 <220> FEATURE:
1078 <221> NAME/KEY: UNSURE
1079 <222> LOCATION: (212)
1080 <223> OTHER INFORMATION: Xaa=Thr, Ala or Ser → what about Xaa at location 213?
W--> 1082 <220> FEATURE:
1083 <221> NAME/KEY: UNSURE
1084 <222> LOCATION: (215)
1085 <223> OTHER INFORMATION: Xaa=Arg or His "Leu" is at location 215
W--> 1087 <220> FEATURE:
1088 <221> NAME/KEY: UNSURE
1089 <222> LOCATION: (216)
1090 <223> OTHER INFORMATION: Xaa=Pro or Ser
W--> 1092 <220> FEATURE:
1093 <221> NAME/KEY: UNSURE
1094 <222> LOCATION: (217)
1095 <223> OTHER INFORMATION: Xaa=Ile or Leu → what about Xaa at location 218?
W--> 1097 <220> FEATURE:
1098 <221> NAME/KEY: UNSURE
1099 <222> LOCATION: (219)
1100 <223> OTHER INFORMATION: Xaa=Ala or Asp "Ile" is at location 219
W--> 1102 <220> FEATURE:
1103 <221> NAME/KEY: UNSURE
1104 <222> LOCATION: (220)
1105 <223> OTHER INFORMATION: Xaa=Thr, Ala or Ser
W--> 1107 <220> FEATURE:
1108 <221> NAME/KEY: UNSURE
1109 <222> LOCATION: (221)
1110 <223> OTHER INFORMATION: Xaa=Gly or Ser → what about Xaa at location 222?
W--> 1112 <220> FEATURE:
1113 <221> NAME/KEY: UNSURE
1114 <222> LOCATION: (226)
1115 <223> OTHER INFORMATION: Xaa=Val or Ile "Val" is at location 226
W--> 1117 <220> FEATURE:
1118 <221> NAME/KEY: UNSURE
1119 <222> LOCATION: (228)
1120 <223> OTHER INFORMATION: Xaa=Thr or Ser → what about Xaa at location 229?
W--> 1122 <220> FEATURE:
1123 <221> NAME/KEY: UNSURE
1124 <222> LOCATION: (230)
1125 <223> OTHER INFORMATION: Xaa=Gly or Ala "Val" is at location 230 → what about Xaa at location 231?
W--> 1127 <220> FEATURE:
1128 <221> NAME/KEY: UNSURE
1129 <222> LOCATION: (234)
1130 <223> OTHER INFORMATION: Xaa=Thr or Ser "Glu" is at location 234 → what about Xaa at location 235?
W--> 1132 <220> FEATURE:
1133 <221> NAME/KEY: UNSURE

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Input Set : A:\bbl174 seq listing.txt
Output Set: N:\CRF3\01182002\I744100A.raw

1134 <222> LOCATION: (237)
1135 <223> OTHER INFORMATION: Xaa=Ala or Pro
W--> 1137 <220> FEATURE:
1138 <221> NAME/KEY: UNSURE
1139 <222> LOCATION: (245)
1140 <223> OTHER INFORMATION: Xaa=Ala or Val
W--> 1142 <220> FEATURE:
1143 <221> NAME/KEY: UNSURE
1144 <222> LOCATION: (249)
1145 <223> OTHER INFORMATION: Xaa=Ile or Leu
W--> 1147 <220> FEATURE:
1148 <221> NAME/KEY: UNSURE
1149 <222> LOCATION: (252)
1150 <223> OTHER INFORMATION: Xaa=Ala or Ser
W--> 1152 <220> FEATURE:
1153 <221> NAME/KEY: UNSURE
1154 <222> LOCATION: (253)
1155 <223> OTHER INFORMATION: Xaa=Ile, Leu or Val
W--> 1157 <220> FEATURE:
1158 <221> NAME/KEY: UNSURE
1159 <222> LOCATION: (256)
1160 <223> OTHER INFORMATION: Xaa=Ala or Ser
W--> 1162 <220> FEATURE:
1163 <221> NAME/KEY: UNSURE
1164 <222> LOCATION: (259)
1165 <223> OTHER INFORMATION: Xaa=Ile or Leu
W--> 1167 <220> FEATURE:
1168 <221> NAME/KEY: UNSURE
1169 <222> LOCATION: (261)
1170 <223> OTHER INFORMATION: Xaa=Ile or Leu
W--> 1172 <220> FEATURE:
1173 <221> NAME/KEY: UNSURE
1174 <222> LOCATION: (269)
1175 <223> OTHER INFORMATION: Xaa=Glu or Ala
W--> 1177 <220> FEATURE:
1178 <221> NAME/KEY: UNSURE
1179 <222> LOCATION: (272)
1180 <223> OTHER INFORMATION: Xaa=Asp or Asn
W--> 1182 <220> FEATURE:
1183 <221> NAME/KEY: UNSURE
1184 <222> LOCATION: (275)
1185 <223> OTHER INFORMATION: Xaa=Gly or Asp
W--> 1187 <220> FEATURE:
1188 <221> NAME/KEY: UNSURE
1189 <222> LOCATION: (176)
1190 <223> OTHER INFORMATION: Xaa=Thr, Ala or Gly
W--> 1192 <220> FEATURE:
1193 <221> NAME/KEY: UNSURE
1194 <222> LOCATION: (182)

"Gln" is at location 237
what about Xaa at location 238?
"Thr" is at location 245
what about Xaa at location 246?
"Glu" is at location 249
what about Xaa at location 250?
"Ala" is at location 252
what about Xaa at location 254?
"Ala" is at location 256
"Leu" is at location 259
what about Xaa at location 260?
"Leu" is at location 261
what about Xaa at location 262?
what about Xaa at location 266?
"Leu" is at location 269
what about Xaa at location 270?
"Arg" is at location 272
what about Xaa at location 273?
"Pro" is at location 275
what about Xaa at location 276?
"Gly" is at location 176

RAW SEQUENCE LISTING DATE: 01/19/2002
PATENT APPLICATION: US/09/744,100A TIME: 11:42:19

Input Set : A:\bb1174 seq listing.txt
Output Set: N:\CRF3\01182002\I744100A.raw

1195 <223> OTHER INFORMATION: Xaa=Ser or Cys "Leu" is at location 182
W--> 1197 <220> FEATURE:
1198 <221> NAME/KEY: UNSURE
1199 <222> LOCATION: (227)
1200 <223> OTHER INFORMATION: Xaa=Ala or Thr
W--> 1202 <220> FEATURE:
1203 <221> NAME/KEY: UNSURE
1204 <222> LOCATION: (280)
1205 <223> OTHER INFORMATION: Xaa=Val, Glu or Lys "Lys" is at location 280
W--> 1207 <220> FEATURE:
1208 <221> NAME/KEY: UNSURE
1209 <222> LOCATION: (281)
1210 <223> OTHER INFORMATION: Xaa=Val or Ile what about Xaa at location 282?
W--> 1212 <220> FEATURE:
1213 <221> NAME/KEY: UNSURE
1214 <222> LOCATION: (284)
1215 <223> OTHER INFORMATION: Xaa=Lys or Ala "Ile" is at location 284
W--> 1217 <220> FEATURE: what about Xaa at location 285?
1218 <221> NAME/KEY: UNSURE
1219 <222> LOCATION: (288)
1220 <223> OTHER INFORMATION: Xaa=Lys, Gln or Arg "Arg" is at location 288
W--> 1222 <220> FEATURE: what about Xaa at location 289?
1223 <221> NAME/KEY: UNSURE
1224 <222> LOCATION: (290)
1225 <223> OTHER INFORMATION: Xaa=Val or Met "Met" is at location 290
W--> 1227 <220> FEATURE:
1228 <221> NAME/KEY: UNSURE
1229 <222> LOCATION: (291)
1230 <223> OTHER INFORMATION: Xaa=Glu or Ala
W--> 1232 <220> FEATURE:
1233 <221> NAME/KEY: UNSURE
1234 <222> LOCATION: (292)
1235 <223> OTHER INFORMATION: Xaa=Asp or Glu what about Xaa at location 293?
W--> 1237 <220> FEATURE:
1238 <221> NAME/KEY: UNSURE
1239 <222> LOCATION: (294)
1240 <223> OTHER INFORMATION: Xaa=Lys or Gln "Gly" is at location 294
W--> 1242 <220> FEATURE: what about Xaa at location 295?
1243 <221> NAME/KEY: UNSURE
1244 <222> LOCATION: (296)
1245 <223> OTHER INFORMATION: Xaa=Gly or Ala "Val" is at location 296
W--> 1247 <220> FEATURE: what about Xaa at location 297?
1248 <221> NAME/KEY: UNSURE
1249 <222> LOCATION: (304)
1250 <223> OTHER INFORMATION: Xaa=Glu, Asn or Gly "Val" is at location 304
W--> 1252 <220> FEATURE: what about Xaa at location 305?
1253 <221> NAME/KEY: UNSURE
1254 <222> LOCATION: (308)
1255 <223> OTHER INFORMATION: Xaa=Arg or His "Val" is at location 308

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PATENT APPLICATION: US/09/744,100A TIME: 11:42:19

Input Set : A:\bb1174 seq listing.txt
Output Set: N:\CRF3\01182002\I744100A.raw

W--> 1257 <220> FEATURE:
1258 <221> NAME/KEY: UNSURE
1259 <222> LOCATION: (309)
1260 <223> OTHER INFORMATION: Xaa=Ala or Ser
W--> 1262 <220> FEATURE:
1263 <221> NAME/KEY: UNSURE
1264 <222> LOCATION: (405)
1265 <223> OTHER INFORMATION: Xaa=His or Ile
W--> 1267 <220> FEATURE:
1268 <221> NAME/KEY: UNSURE
1269 <222> LOCATION: (428)
1270 <223> OTHER INFORMATION: Xaa=Ala or Thr
1273 <400> SEQUENCE: 12

what about Xaa at location 310?
what about Xaa at location 316?
what about Xaa at location 339?
only 345 amino acids in seq. 12

```
W--> 1274 Met Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1275   1               5                  10                  15
W--> 1277 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1278               20                  25                  30
W--> 1280 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1281           35                  40                  45
W--> 1283 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ala Xaa Ala Xaa Xaa Xaa
1284       50                  55                  60
W--> 1286 Xaa Xaa Arg Val Asp Val Leu Ser Glu Xaa Leu Pro Phe Ile Gln Xaa
1287  65                  70                  75                  80
W--> 1289 Phe Xaa Gly Lys Thr Xaa Val Val Lys Tyr Gly Gly Ala Ala Met Lys
1290                85                  90                  95
W--> 1292 Ser Pro Glu Leu Gln Ala Ser Val Ile Xaa Asp Leu Val Leu Leu Ser
1293            100                 105                 110
W--> 1295 Cys Val Gly Leu Xaa Pro Val Leu Val His Gly Gly Gly Pro Glu Ile
1296        115                 120                 125
W--> 1298 Asn Ser Trp Leu Xaa Arg Xaa Xaa Xaa Xaa Xaa Xaa Phe Arg Xaa Gly
1299    130                 135                 140
W--> 1301 Leu Arg Val Thr Asp Ala Xaa Xaa Met Glu Xaa Val Xaa Met Val Leu
1302 145                 150                 155                 160
W--> 1304 Val Xaa Lys Val Asn Lys Xaa Leu Xaa Ser Leu Ile Xaa Xaa Xaa Gly
1305                165                 170                 175
W--> 1307 Xaa Xaa Ala Xaa Xaa Leu Xaa Xaa Xaa Xaa Xaa Arg Leu Xaa Xaa Xaa
1308            180                 185                 190
W--> 1310 Arg Pro Xaa Pro Xaa Xaa Xaa Xaa Leu Xaa Xaa Val Gly Xaa Val Xaa
1311        195                 200                 205
W--> 1313 Arg Xaa Xaa Xaa Xaa Val Leu Xaa Xaa Xaa Ile Xaa Xaa Xaa His Ile
1314    210                 215                 220
W--> 1316 Pro Val Xaa Xaa Xaa Val Xaa Ala Asp Glu Xaa Gly Gln Xaa Tyr Asn
1317 225                 230                 235                 240
W--> 1319 Ile Asn Ala Asp Thr Xaa Ala Gly Glu Xaa Ala Ala Xaa Xaa Gly Ala
1320                245                 250                 255
W--> 1322 Glu Lys Leu Xaa Leu Xaa Thr Asp Val Xaa Gly Ile Leu Xaa Asp Arg
1323            260                 265                 270
W--> 1325 Xaa Asp Pro Xaa Ser Leu Val Lys Xaa Xaa Asp Ile Xaa Gly Val Arg
1326        275                 280                 285
```

OK
OK

RAW SEQUENCE LISTING DATE: 01/19/2002
PATENT APPLICATION: US/09/744,100A TIME: 11:42:19

Input Set : A:\bb1174 seq listing.txt
Output Set: N:\CRF3\01182002\I744100A.raw

```
W--> 1328 Xaa Met Xaa Xaa Xaa Gly Xaa Val Xaa Gly Gly Met Ile Pro Lys Val
     1329      290                 295                 300
W--> 1331 Xaa Cys Cys Val Xaa Xaa Leu Ala Gln Gly Val Xaa Thr Ala Ser Ile
     1332 305                 310                 315                 320
     1334 Leu Asp Gly Arg Val Pro His Ser Leu Leu Leu Glu Ile Leu Thr Asp
     1335                 325                 330                 335
W--> 1337 Glu Gly Xaa Gly Thr Met Ile Thr Gly
     1338             340                 345
E--> 1341 3
```

delete

Use of n and/or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY DATE: 01/19/2002
PATENT APPLICATION: US/09/744,100A TIME: 11:42:20

Input Set : A:\bb1174 seq listing.txt
Output Set: N:\CRF3\01182002\I744100A.raw

L:143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:201 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:350 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:351 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:404 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:407 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:888 M:283 W: Missing Blank Line separator, <220> field identifier
L:892 M:283 W: Missing Blank Line separator, <220> field identifier
L:1274 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1277 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1280 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1283 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1286 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1289 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1292 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1298 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1301 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1304 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1307 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1310 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1313 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1316 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1319 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1322 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1325 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1331 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1337 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1341 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:12